

Serial No. 10/517.541

Atty. Docket NL 020507

Serial No. 10/517,541

Group Art Unit: 1793

Filed: DECEMBER 10, 2004

Examiner: ELVE, MARIA A.

Title: DEVICE FOR SCANNING AND CLEANING AN INFORMATION CARRIER

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Board of Patent Appeals and Interferences
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

APPEAL BRIEF

Sir:

Appellant herewith respectfully presents a Brief on Appeal as follows, having filed a Notice of Appeal on March 31, 2008:

REAL PARTY IN INTEREST

The real party in interest in this appeal is the assignee of record Koninklijke Philips Electronics N.V., a corporation of The Netherlands having an office and a place of business at Groenewoudseweg 1, Eindhoven, Netherlands 5621 BA.

RELATED APPEALS AND INTERFERENCES

Appellant and the undersigned attorney are not aware of any other appeals or interferences which will directly affect or be directly affected by or having a bearing on the Board's decision in the pending appeal.

STATUS OF CLAIMS

Claims 1-10 are pending in this application. Claims 1-10 are rejected in the Final Office Action mailed in December 31, 2007. This rejection was upheld, in an Advisory Action that mailed February 25, 2008. Claims 1-10 are the subject of this appeal.

STATUS OF AMENDMENTS

Appellant filed on February 11, 2008 an after final amendment in response to a Final Office Action mailed December 31, 2007. The after final amendment included amendments to independent claim 1. In an Advisory Action mailed on February 25, 2008, it is indicated that the after final amendment filed on February 11, 2008 will not be entered and does not place the application in condition for allowance. This Appeal Brief is in response to the Final Office Action mailed December 31, 2007, that finally rejected claims 1-10, which remain finally rejected in the Advisory Action mailed on February 25, 2005.

SUMMARY OF THE CLAIMED SUBJECT MATTER

The present invention, for example, as recited in independent claim 1, is directed to a device reading information shown in FIG 5, and described on page 6, lines 1-3 of the specification. The device reads information represented by marks 38 shown in FIGs 3-4 in a data or recording layer 16 (FIG 1b) on an information carrier 11 (FIGs 1a and 2).

As described on page 4, lines 29-31 of the specification, the data layer that includes marks 38 is spaced apart from a surface 36 of the information carrier which may include a dust particle 31 and is to be cleaned. As described on page 5, lines 4-6 of the specification and shown in FIG 5, the device comprises a scanning unit 52 for generating a read signal from the marks 38. As shown in FIGs 3-5, a radiation source 34 and optical elements 32 for generating a beam of radiation 35 are provided for reading the data layer 16 (FIG 1b) that include marks 38 shown in FIG 3-4.

The device further comprises focusing means such as including a focusing actuator 59 as shown in FIG 5 and described on page 6, lines 10-13 of the specification. The focusing means are for

controlling at least one of the optical elements, e.g., lens 32 shown in FIGS 3-4, for creating a spot 66 by focusing the beam 35, where the spot 66 is focused on the data layer 16 for reading the marks 38.

The device further comprises cleaning means which includes a cleaning control unit 51 for focusing the beam 35 on the surface 36 of the information carrier 11 and for controlling the power of the laser for cleaning, as described on page 6, lines 22-23, and shown in FIGS 3-5. The cleaning means are for cleaning the surface 36 of the information carrier 36 that includes a dust particle 31, for example, as shown in FIG 4.

As described on page 6, lines 30-34 the cleaning means further comprise control means, such as controller 56 shown in FIG 5 for performing the cleaning by controlling the focusing means to focus refocus the spot 66 substantially on the surface 36 of the information carrier 11 and for controlling the power of the radiation source 34. Hardware, firmware and/or software may be used to implement the control and cleaning means, including a microprocessor, a program memory and control gates.

GROUND OF REJECTION TO BE REVIEWED ON APPEAL

Whether claims 1-2 and 4-7 of U.S. Patent Application Serial No. 10/517,541 are anticipated under 35 U.S.C. §102(b) by U.S. Patent No. 6,394,105 (Boszormenyi); and

Whether claims 3 and 9 of U.S. Patent Application Serial No. 10/517,541 are unpatentable under 35 U.S.C. §103(a) over Boszormenyi in view of U.S. Patent Application Publication No. 2002/0181379 (Warmenhoven).

ARGUMENT

Claims 1-2 and 4-7 are said to be anticipated by Boszormenyi.

Appellant respectfully requests the Board to address the patentability of independent claim 1, and further claims 2-10 as depending from independent claim 1, based on the requirements of independent claim 1. This position is provided for the specific and stated purpose of simplifying the current issues on appeal. However, Appellant herein specifically reserves the right to argue and address the patentability of claims 2-10 at a later date should the separately patentable subject matter of claims 2-10 later become an issue. Accordingly, this limitation of the subject matter presented for appeal herein, specifically limited to discussions of the patentability of independent claim 1 is not intended as a waiver of Appellant's right to argue the patentability of the further claims and claim elements at that later time.

Boszormenyi is directed to an integrated laser cleaning and inspection system. As described on column 3, lines 47-55, Boszormenyi is concerned with the manufacture of clean discs or

recording media. In particular, Boszormenyi describes a cleaning and inspecting procedure, where the cleaning of a surface is done "prior to applying a thin layer of film of magnetic material to the surface" or "after the material has been applied (such as sputtered on) to the substrate surface." (Column 3, lines 50-51 and 54-55)

There is simply to disclosure or suggestion in Boszormenyi of a device for reading information represented by marks in a data layer on an information carrier, where the device include a scanning unit for generating a read signal from the marks, as recited in independent claim 1.

Assuming, arguendo, the Boszormenyi inspection device is analogous to a device that reads information represented by marks in a data layer on an information carrier, the surface that is inspected by Boszormenyi is the very same surface being cleaned, as specifically recited on column 4, lines 27-29.

In stark contrast, the present invention as recited in independent claim 1, amongst other patentable elements recites (illustrative emphasis provided):

Device for reading information represented by marks in a data layer on an information carrier, said

data layer being spaced apart from a surface of said information carrier; ...

a scanning unit for generating a read signal from the marks,...

focusing means for controlling at least one of the optical elements for creating a spot by focusing the beam, said spot being focused on said data layer for said reading and

cleaning means for cleaning a surface of the information carrier, characterized in that

the cleaning means comprise control means for performing said cleaning by controlling the focusing means to refocus the spot substantially on the surface of the information carrier and for controlling the power of the radiation source.

Cleaning by refocusing on a different surface which is spaced apart from a data layer that includes information represented by marks is nowhere disclosed or suggested in Boszormenyi.

Accordingly, it is respectfully submitted that independent claim 1 should be allowable, and allowance thereof is respectfully requested. In addition, it is respectfully submitted that claims 2 and 4-7 should also be allowed at least based on their dependence from independent claim 1.

Claims 3 and 9 are said to be unpatentable over Boszormenyi
and Warmenhoven.

It is respectfully submitted that claims 3 and 9 should be allowed at least based on their dependence from independent claim 1.

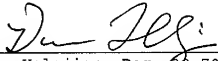
In addition, Appellant denies any statement, position or averment of the Examiner that is not specifically addressed by the foregoing argument and response. Any rejections and/or points of argument not addressed would appear to be moot in view of the presented remarks. However, the Appellant reserves the right to submit further arguments in support of the above stated position, should that become necessary. No arguments are waived and none of the Examiner's statements are conceded.

CONCLUSION

Claims 1-10 are patentable over Boszormenyi and Warmenhoven.

Thus, the Examiner's rejections of claims 1-10 should be reversed.

Respectfully submitted,

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CLAIMS APPENDIX

1. (Previously Presented) Device for reading information represented by marks in a data layer on an information carrier, said data layer being spaced apart from a surface of said information carrier; the device comprising:

a scanning unit for generating a read signal from the marks,
a radiation source and optical elements for generating a beam of radiation for reading said data layer,

focusing means for controlling at least one of the optical elements for creating a spot by focusing the beam, said spot being focused on said data layer for said reading and

cleaning means for cleaning a surface of the information carrier, characterized in that

the cleaning means comprise control means for performing said cleaning by controlling the focusing means to focus refocus the spot substantially on the surface of the information carrier and for controlling the power of the radiation source.

2.(Original) Device as claimed in claim 1, wherein the control means are arranged for controlling the power of the radiation source in pulses.

3.(Original) Device as claimed in claim 1, wherein the scanning unit includes the radiation source and at least one of the optical elements for scanning a track on the information carrier for generating the read signal and/or recording the marks.

4.(Original) Device as claimed in claim 1, wherein the device comprises detection means for detecting possible contamination of the surface, and wherein the control means are arranged for cleaning parts of the surface where said possible contamination in detected.

5.(Original) Device as claimed in claim 4, wherein the detection means are arranged for detecting contamination based on at least one of: reflection of the surface; an error occurring in the read signal; an error in tracking signals generated by the

scanning unit.

6.(Original) Device as claimed in claim 4, wherein the control means are arranged for cleaning in at least one of the following ways: in radially outward direction from a detected error; repeatedly a part of the surface where said possible contamination is detected; alternately switching the focusing means to focus on the surface and on a track on an information layer of the information carrier for locating said parts based on position information included in the track.

7.(Original) Device as claimed in claim 1, wherein the control means are arranged for cleaning on at least one of the following moments: by interrupting reading or recording of marks when an error is detected; in a background process at moments when no reading or recording is required; after inserting an information carrier in the device.

8.(Original) Device as claimed in claim 1, wherein the

optical elements include an element for creating the spot having an oblong shape perpendicular to a direction of movement on the spot, in particular the element being a cylindrical lens.

9. (original) Device as claimed in claim 1, wherein the device is provided with contamination collecting means for adhering particles removed from the surface of the information carrier by said cleaning, in particular at least part of the inner walls of the device enclosing the information carrier being covered by material with a high surface energy.

10. (Original) Information carrier for use in the device of claim 1, which information carrier is provided with a protective cartridge, characterized in that the cartridge is provided with contamination collecting means at a distance from the surface of the information carrier for adhering particles removed from the surface of the information carrier by said cleaning, in particular at least part of the inner walls of the cartridge being covered by material with a high surface energy.

EVIDENCE APPENDIX

None

Patent
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Appeal Brief in Reply to Final Office Action of December 31, 2007,
and Advisory Action of February 25, 2008

RELATED PROCEEDINGS APPENDIX

None